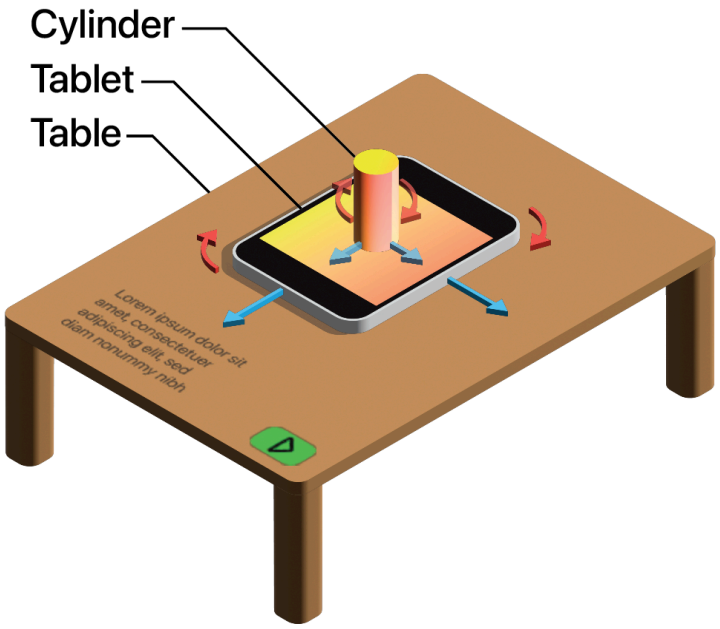

Prototype 3D interactions with cylindrical display

We created Cyli, a cylindrical display that allows users to collaboratively explore and interact with 3D content directly - by moving the display around. We have a prototype that enables some basic demos, but there's so much potential for the system to support engineering, design, education, games, and many other fields.

We're looking for masters students who want to design, program, and evaluate more complex interactions with the system for their graduation and possibly for academic publications in Human-Computer Interaction venues. This means that the graduation project involves a balance of design, programming, and research.

Some example interactions that could be explored by you include:

- **Interacting with 360° video**: 360° video offers visual rich insight into the worlds of others, however viewing it with a VR headset isolates someone from group discussion. How can the multiple interactions of Cyli support collaborative interaction with 360° video?
- **Educational experiences:** there are many science education tools where students engage with 3D simulations, how can Cyli make these interactions richer, easier to understand, and more accessible?
- **Designing 3D content:** 3D games, CAD work, and architectural models are used to help align multiple stakeholders in complex project, however it's often difficult to develop a shared understanding of the complete 3D environment - how can Cyli support this shared understanding and let designers make changes to 3D content in real time?

Interested?

If you would like to know more or have an idea for an interaction or context that you would like to explore, send an email to Wo Meijer: w.i.m.t.meijer@tudelft.nl